# KENTUCKY LEGISLATORS RETIREMENT PLAN

ACTUARIAL VALUATION AND REPORT

AS OF JULY 1, 2015

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### INTRODUCTION

An actuarial valuation of the Kentucky Legislators Retirement Plan ("KLRP") has been performed as of July 1, 2015. Actuarial valuations are based on the integrity of employee data, plan asset data, plan provisions and an extensive set of assumptions regarding future events. There is necessary uncertainty with any actuarial calculation based on the accuracy of the data provided, the correct interpretation of plan provisions and the realization of the assumptions made. These results were based on participant data and asset information provided by The Kentucky Judicial Form Retirement System. This information was not audited but was reviewed for reasonableness.

Detailed explanations of the actuarial assumptions and methods used in the report are contained in later sections of this report. Also included in this report is a summary of provisions of the plan as we understand them.

This report provides details on the actuarial valuation underlying the recommended contribution to the KLRP for plan years commencing in 2016 and 2017. This determination was performed pursuant to Kentucky Revised Statute ("KRS") §21.525 for the retirement system defined in KRS §6.500 to §6.577. KRS §21.525, as well as other statutes found in KRS Chapter 21 cited hereafter, are made applicable to KLRP by KRS §6.525.

Governmental Accounting Standards Board Statement 67 ("GASB 67") and Statement 43 ("GASB 43") establish financial reporting standards for defined benefit pension plans and other postemployment benefit (OPEB) plans sponsored by employers that are subject to governmental accounting standards. Governmental Accounting Standards Board Statement 68 ("GASB 68") and Statement 45 ("GASB 45") provide standards for reporting pension and OPEB expenditures and expense, and related liabilities and assets for such plans. The purpose of this report is to provide pertinent financial statement disclosure information for the fiscal year ending in 2015. Actuarial computations under Statements 67, 68, 43, and 45 are for purposes of fulfilling plan and employer governmental accounting requirements. This report has been prepared on a basis consistent with our understanding of the statements and does not constitute legal, accounting, tax or investment advice.

Statement 68 sets forth a methodology for the calculation of the annual Pension Expense for the upcoming fiscal year. GASB 68 provides a method for reflecting prior gains and losses from asset and plan experience, as well as other areas including plan amendments. Amounts not reflected previously or in the upcoming year are reflected in the Deferred Outflows and Inflows of Resources shown.

Statement 45 sets forth a methodology to determine annual adjustments to the Annual Required Contribution (ARC), which is the contribution recommended pursuant to the appropriate actuarial valuation, to account for differences between amounts expensed and contributions actually made. Under GASB 45, the resulting adjusted amount is referred to as the Annual OPEB Cost (AOC) and the accumulated difference between the AOC and the actual contribution is referred to as the Net OPEB Obligation (NOO).

BPS&M is not providing information concerning liabilities other than benefits, such as for legal or accounting fees.

BPS&M is not aware of any significant events subsequent to the current year's measurement date that could materially affect the information contained in this report.

We are not aware of any relationship between the plan or plan sponsor and BPS&M, LLC or our parent corporation, Wells Fargo Company, which would impair or appear to impair our objectivity.

To the best of our knowledge, all information provided in this report is complete and accurate and disclosures for GASB purposes have been determined in accordance with generally accepted accounting principles.

### **SUMMARY OF REPORT**

An actuarial valuation of the Kentucky Legislators Retirement Plan ("KLRP") was conducted as of July 1, 2015. The purpose of the valuation is to determine the cost implications of the plan including a determination of annual funding levels for the fiscal years beginning July 1, 2016 and July 1, 2017.

In 2013 the applicable state statutes were amended to close participation in the traditional defined benefit, with all individuals first electing to participate in KLRP on or after January 1, 2014 being covered under a new hybrid cash balance tier. **This report covers only the traditional defined benefit/OPEB tier of KLRP.** 

It is our understanding that this plan is a "governmental plan" as defined in Internal Revenue Code Section 414(d) and this report has been prepared on that basis.

On the basis of the valuation, it has been determined that the annual funding requirements for the State for the fiscal year beginning in 2016 for the plan, as described in the Summary of Benefits section of this report, are as follows:

	 Total Amount	Percent of Payroll
Annual Required Contribution	\$ 2,384,575	53.38%
Recommended Contribution	\$ 2,645,007	59.21%

The Annual Required Contribution is determined based on assumptions and methods set forth in the statute and established by the Board of Trustees. The Recommended Contribution uses assumptions and methods that we believe produce an actuarially sound approach to funding.

#### **Summary of Selected Plan Information**

	Plan Year Beginning		
		7/1/2015	7/1/2013
Number of Participants			
Active		104	118
Terminated Vested		45	44
Retired		150	147
Beneficiaries		44	39
Total		343	348
Average Age (for actives)		57.3	55.9
Average Service (for actives)		12.8	11.8
Annual Covered Payroll	\$	4,467,419 \$	4,987,823
Average Salary		42,956	42,270
Accrued Liability		102,049,848	95,964,888
Actuarial Asset Value		86,847,256	67,269,660
Market Asset Value		97,264,968	78,320,971
Unfunded Accrued Liability (UAL)		15,202,592	28,695,228
Funded Ratio (AVA/AL)		85.10%	70.10%
Annual Funding Level <sup>1</sup>			
State Portion of Normal Cost	\$	1,111,574 \$	1,070,890
Expected Employee Contributions		237,828	262,993
Total Normal Cost		1,349,402	1,333,883
State Annual Required Contribution		2,384,575	3,366,508
Percent of Covered Payroll		53.38%	67.49%

<sup>&</sup>lt;sup>1</sup>In accordance with KRS 21.405 (does not recognize cost of living increases effective after the most recent valuation date) and KRS 21.525 (legally prescribed funding method)

### **SUMMARY OF REPORT**

#### **Reconciliation of Total Funding Requirement**

		Annual
		Recommended
	Accrued Liability	Contribution
	(\$M)	(\$M)
Prior Valuation ARC Calculation	95.96	3.37
+ Impact of Current Year Asset Gain/Loss		-0.33
+ Impact of Contribution Less Than Minimum Required		+0.11
+ Recognition of Prior Asset Gain/Loss		-0.59
+ Other Gain/Loss		-0.39
Current Year Calculation w/ Prior Assumptions	100.31	2.17
+ Updated Mortality Assumption	+1.74	+0.16
Subtotal	102.05	2.33
+ Split of Funding Requirement Calculation	+0.00	+0.05
Annual Required Contribution <sup>1</sup>	102.05	2.38
+ 25 Year Amortization of Unfunded Liability	+0.00	+0.01
Subtotal	102.05	2.39
+ Included Full COLA Assumption	+3.18	+0.26
<b>Minimum Recommended Contribution</b> <sup>2</sup>	105.23	2.65

<sup>&</sup>lt;sup>1</sup> In accordance with KRS 21.405 (does not recognize cost of living increases effective after the most recent valuation date) and KRS 21.525 (legally prescribed funding method)

#### Legislative Background

As stated previously, state statues were amended in 2013 such that all participants entering KLRP on or after January 1, 2014 will be covered under a hybrid cash balance/OPEB tier; those entering before that date will continue to be covered under the traditional defined benefit/OPEB tier. The legislation making this change also restricted the availability of future cost-of-living adjustments (COLA's) to plan benefits.

Statement No. 25 of the Governmental Accounting Standards Board was amended by Statement No. 67 of the Governmental Accounting Standards Board. GASB 67 became effective for the plan's financial statements for the plan's fiscal year beginning after June 15, 2013. GASB 67 establishes financial reporting standards for state and local government pension plans that are administered through trusts or equivalent arrangements. The objective of this statement is to improve the usefulness of the information included in pension plan reports. GASB 67 requires, among other things, the replacement of the Net Pension Obligation with the Unfunded Net Liability, which is the Entry Age Normal accrued liability (including all future COLA's) minus the market value of assets.

Statement No. 27 of the Governmental Accounting Standards Board was amended by Statement No. 68 of the Governmental Accounting Standards Board. GASB 68 became effective for the plan's financial statements for the plan's fiscal year beginning after June 30, 2014. The statement provides standards for reporting pension expenditures and expense, and related pension liabilities and assets, for such plans. GASB 68 requires the determination of the pension expense for the fiscal year beginning July 1, 2014. GASB 68 provides a new approach in calculating the pension expense which differs significantly from GASB 27 methodology.

<sup>&</sup>lt;sup>2</sup> Without regards to KRS 21.405 or KRS 21.525. COLA's will not be granted until the plan is 100% funded (unless current year COLA is prefunded). If all future assumptions are met, ignoring future COLA's in the funding valuation will result in a funding percentage which is always less than 100% when future COLA's are assumed.

### **SUMMARY OF REPORT**

#### **Actuarial Soundness**

A plan that has adopted a reasonable funding method, that adopts reasonable assumptions and which contributes at a rate at or above the recommended contribution rate (based on these reasonable methods and assumptions), could be considered to be actuarially sound.

In order to ensure KLRP is funded in an "actuarially sound manner", we would recommend the following:

- 1. Reflect a 1.5% future COLA assumption when calculating the funding requirement for KLRP (only a minimal COLA, as described later in this report, is currently assumed), to the extent future cost-of-living increases are expected to occur, or intended to be provided.
- 2. Revise the actuarial funding method to amortize all past unfunded as well as new liabilities over a period not more than 30 years (we suggest shorter periods for various sources of new liability) and amortize future gains and losses over a period not more than 15 years. (Note that GASB 68 may require the expensing of liabilities at a faster pace than these amortization periods.)
- 3. Contribute at least the recommended contribution each year.

Deviations from these recommendations may result in an "actuarially unsound" approach to funding KLRP and may eventually result in KLRP becoming insolvent – that is, exhausting assets at which time all future benefits would be provided on a pay as you go basis.

Although the Actuarial Standards of Practice 4 "Measuring Pension Obligations" allows for plan liabilities to be calculated under a legally prescribed method, the statement goes on to say,

"If, in the actuary's professional judgment, such an actuarial cost method or amortization method is significantly inconsistent with the plan accumulating adequate assets to make benefit payments when due, assuming that all actuarial assumptions will be realized and that the plan sponsor or other contributing entity will make contributions when due, the actuary should disclose this."

It is our professional actuarial option that the current legally prescribed method, which requires contributions of normal cost plus interest on the unfunded liability plus 1% of the unfunded liability (per KRS 21.525) and which (per KRS 21.405) does not recognize cost of living increases effective after the most recent valuation (assuming future increases are expected), is inconsistent with the plan accumulating adequate assets to make benefit payments when due, assuming all actuarial assumptions are realized. The current method of amortizing unfunded liabilities will not result in the full amortization of those liabilities.

### **ACTUARIAL CERTIFICATION**

The information contained in this document (including any attachments) is not intended by BPS&M to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer. The information and valuation results shown in this report are, to the best of our knowledge, complete and accurate and are based upon the following:

- 1. Employee census data as of July 1, 2015, submitted by The Kentucky Judicial Form Retirement System. This data was not audited by us but appears to be sufficient and reliable for purposes of the report.
- 2. Financial data as of June 30, 2015, submitted by The Kentucky Judicial Form Retirement System. This data was not audited by us but appears to be sufficient and reliable for purposes of the report.
- 3. Actuarial assumptions and methods as established either by statute or the Board. The actuarial assumptions currently adopted by the Board appear to be reasonable, both individually and in aggregate. However, exclusion of retiree cost-of-living adjustments that can be reasonably anticipated to occur in future years (or for which there is an intent to provide in future years) does not reflect our best estimate of expected experience under the plan. As such, the valuation results presented in this report do not fully reflect the potential liability for future retiree cost-of-living adjustments. For purposes of the calculation of the Recommended Contribution, full future retiree cost-of-living adjustments have been reflected.
- 4. For purposes of GASB 43, 45, 67, and 68 disclosures, assets were split between pension and retiree medical liabilities on the basis of accrued liability as of July 1, 2008 and have been brought forward each year from that date based on actual cash flows and a prorata allocation of investment return. This methodology, initiated by the prior actuary, was based on guidance from the plan's auditor.

We believe the information is sufficiently complete and reliable. This report provides actuarial advice and does not constitute legal, accounting, tax or investment advice.

The actuarial valuation summarized in this report has been performed utilizing generally accepted actuarial principles. It is my opinion that the results fully and fairly disclose the actuarial position of the plan on the valuation date. I am a consulting actuary for BPS&M, LLC, member of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.

Certified by:

Olan C. Pennington, F. S. A. Alan C. Pennington, F.S.A., E.A., M.A.A.A.

October 12, 2015

Date

Consulting Actuary/Principal

Bryan, Pendleton, Swats & McAllister, LLC 5301 Virginia Way, Suite 400 Brentwood, TN 37027 (615) 665-1640

# ANNUAL REQUIRED CONTRIBUTION

# **Determination of Annual Required Contribution as of July 1, 2015**

1. Accrued Liability	Pension +	<u>OPEB</u> =	<u>Total</u>
Actives			
Actives *	24,430,902	-	24,430,902
Medical Premium Supplement	-	10,390,506	10,390,506
Total Active Liability	24,430,902	10,390,506	34,821,408
Inactives			
Retired	32,050,664	-	32,050,664
Deferred Vested *	13,661,354	-	13,661,354
Beneficiaries	4,951,494	-	4,951,494
Medical Premium Supplement	-	16,564,928	16,564,928
Total Inactive Liability	50,663,512	16,564,928	67,228,440
Total Accrued Liability	75,094,414	26,955,434	102,049,848
2. Valuation Assets	53,652,356	33,194,900	86,847,256
3. Unfunded Past Service Liability	21,442,058	(6,239,466)	15,202,592
4. Gross Normal Cost			
Retirement Related *	907,038	=	907,038
Medical Premium Supplement Related	-	442,364	442,364
Total Normal Cost	907,038	442,364	1,349,402
5. Annual Covered Payroll	4,467,419	4,467,419	4,467,419
6. Estimated Employee Contributions for the Next 12 Months	237,828	-	237,828
7. Net Normal Cost (4 - 6)	669,210	442,364	1,111,574
8. Interest plus 1% of Unfunded Past Service Liability	1,715,365	(499,157)	n/a
9. Total Annual Required Contribution (max (0, 7 + 8))	2,384,575	-	2,384,575
10 . Payment as a Percentage of Covered Payoll (9 / 5)	53.38%	0.00%	53.38%

<sup>\*</sup> includes 40% loading for non-legislative salaries

# ANNUAL REQUIRED CONTRIBUTION

# Estimated Cost of a One-Time COLA as of July 1, 2015

1. Liability In Payment

a)	Retired	32,050,664
b)	Beneficiaries	4,951,494
	Total Liability In Payment	37,002,158
2. Desired	d COLA Percentage	1.50%
3. Cost of	f One Time COLA (1 * 2)	555.032*

<sup>\*</sup> Cost of 1.5% COLA increase applied to all members in pay status as of the valuation date.

# ACTUARIAL ASSET VALUE

# **Determination of Actuarial Asset Value as of July 1, 2015**

	20	014-15 Plan Year	20	013-14 Plan Year	20	012-13 Plan Year	20	011-12 Plan Year
Interest Return Assumption		7.00%		7.00%		7.00%		7.00%
Market Value at Beginning of Year								
Amount	\$	89,077,557	\$	78,320,971	\$	67,534,503	\$	63,964,450
Interest to End of Year		6,235,429		5,482,468		4,727,415		4,477,512
Employer Contributions								
Amount		3,366,500		1,824,956		1,696,000		1,027,200
Interest to End of Year		117,828		63,873		59,360		35,952
Member Contributions								
Amount		216,777		273,046		263,307		384,292
Interest to End of Year		7,587		9,557		9,216		13,450
Transfers from KERS								
Amount		-		-		-		-
Interest to End of Year		-		_		_		-
Benefits Paid								
Amount		4,380,271		4,274,685		4,086,488		3,983,710
Interest to End of Year		166,085		162,082		154,946		151,049
Expected End of Year Assets		94,475,322		81,538,104		70,048,367		65,768,097
Market Value at End of Year		97,264,968		89,077,557		78,320,971		67,534,503
Investment Gain (Loss)		2,789,646		7,539,453		8,272,604		1,766,406
Adjustment Percentage		80%		60%		40%		20%
Actuarial Asset Value Adjustment		(2,231,717)		(4,523,672)		(3,309,042)		(353,281)
Actuarial Asset Value (Market Value		, , ,		,		,		, ,
plus Adjustment)	\$	86,847,256						

		Medical
	Retirement	Supplement
Market Value at Beginning of Year	\$54,644,796	\$34,432,761
State Contributions	3,366,500	-
Member Contributions	216,777	-
Transfers In Payments	-	-
Distributions	3,690,251	690,020
Allocated Investment Return	5,550,371	3,434,034
Market Value at End of Year	\$60,088,193	\$37,176,775
Allocation of Actuarial Asset Value	\$53,652,356	\$33,194,900

This summary is not a Summary Plan Description or a plan document. You should not rely solely on this summary in making a determination of eligibility of benefits.

#### **Source**

Sections 6.500-6.577 of the Kentucky Revised Statues.

#### **Eligibility for Membership**

Members of the General Assembly may elect to make monthly contributions within 30 days after taking office, and thereby become eligible for membership in the plan. Individuals commencing participation on or after January 1, 2014 will participate in the hybrid plan.

#### **Employee Contributions**

Members entering the plan on or after September 1, 2008 must contribute 6% of their "creditable compensation". Members entering the plan prior to September 1, 2008 must contribute 5% of their "creditable compensation". Once a member has earned sufficient service credit to have accrued a benefit of 100% of final average compensation, then employee contributions shall cease.

#### **Creditable Compensation**

Creditable compensation is based on actual compensation received during each year.

#### **Normal Retirement**

#### Condition

Members who have attained age 65 and completed at least 5 years of legislative service, or have additional service credit under other authorized state systems so that when added to legislative service credit equals at least 8 years of credit. However, the age 65 requirement shall be reduced by one year for each five years of service, and one year for each year served beyond the years of service needed to accrue a benefit of 100% of final average compensation, but with total reduction not to reduce the age requirement below 60. The full accrued benefit will also be payable upon completion of 27 years of service credit.

#### Benefit

A member will receive a retirement income at normal retirement date payable monthly for life equal to a percentage of final average compensation multiplied by years of service. In no event shall retirement income exceed 100% of final average compensation. (Final average compensation means the average monthly compensation of the member for his or her highest 36 months of State salary).

The benefit rates vary according to date of legislative service begins, as follows:

- 1. If a legislator was a member of the plan on July 1, 1982, and entered legislative service prior to July 1, 1978, the benefit rate is 5.00% for all legislative service prior to July 1, 1978, and for all service that continues without interruption after that date.
- 2. If a legislator was a member of the plan on July 1, 1982 and entered legislative service between July 1, 1978 and June 30, 1980, the benefit rate is 4.15% for all legislative service that continues without interruption thereafter.
- 3. If a legislator was a member of the plan on July 1, 1982 and entered legislative service between July 1, 1980 and June 30, 1982, the benefit rate is 3.50% for all legislative service that continues without interruption thereafter.
- 4. For all other service, the benefit rate is 2.75%.

#### **Early Retirement**

A member who retires prior to normal retirement date and has met the service requirement for normal retirement has two alternatives with regard to receiving retirement income as follows:

- Upon reaching normal retirement age, the member may be vested with the right to receive a monthly service retirement allowance computed and payable on the basis of years of service and applicable average salary, or
- 2. A member may elect to be paid, commencing as of the date of the election, a monthly service retirement allowance equivalent to the amount of monthly allowance that would have been paid had the member waited until reaching normal retirement age, but reduced in accordance with age at the time of election for each year under normal retirement age at the rate of 5% per year.

If the member has 27 or more years of service credit, there shall be no reduction for benefit commencement prior to normal retirement age. If the difference between the number of years of total governmental service and 27 is less than the difference between actual age and normal retirement age, the reduction shall be 5% for each year of service under 27.

#### **Late Retirement**

A legislator may continue service past normal retirement age and will continue to accrue service credits, but cannot receive a benefit in excess of 100% of final average compensation.

#### **Disability Benefit**

#### Condition

No service requirement.

#### Benefit

Upon determination of disability, a member will be eligible to receive ½ of the monthly retirement income that would have been payable commencing at normal retirement date if this member had continued service until that date and then retired. In calculating the retirement income, average salary for the 3 years preceding disability will be used. When a disabled member reaches normal retirement date, the member may apply and start receiving the full amount of retirement income that would have been payable based upon the actual number of years of service and compensation, in lieu of the disability benefit.

#### **Death Benefit**

Upon the death of a member who at the time of death was receiving a retirement income (other than an actuarially reduced income), or was receiving a disability income, the surviving spouse (if married to the member at the time of retirement) is entitled to receive a monthly allowance equal to ½ of what the member was receiving for his/her lifetime.

If a member dies after retirement, and was at the time receiving an actuarially reduced allowance, or was not receiving an allowance, but had acquired a vested right to have received an allowance upon reaching normal retirement date, the surviving spouse (if married to the member at the time of retirement) is entitled to receive ½ of the monthly allowance the member would have received at normal retirement date for his/her lifetime.

If an active member dies before retirement and before reaching normal retirement age, without regard to length of service, the surviving spouse is entitled to receive a monthly allowance payable for his/her lifetime equal to ½ of the monthly retirement income the member would have received commencing at the member's normal retirement date as if the member had continued in service until that date and then retired, computed on the basis of final compensation at the time of death.

If a member dies before retirement and after reaching normal retirement date, the surviving spouse is entitled to receive a monthly allowance payable for his/her lifetime equal to ½ of the monthly allowance the member would have been entitled to on the basis of years of service, had the member retired on his date of death, computed on the basis of final compensation at the time of death.

If a member is not married at the time of death, any death benefits described above to which a surviving spouse would have been entitled will be payable to the children of the deceased member until such time as the youngest child attains age 21, or for the life of a disabled child. Also, a member may designate that survivor benefits shall go in part or in total to minor children instead of the spouse.

If cumulative payments to the member and/or beneficiary do not exceed the member's total contributions to this plan, then the excess of such contributions over cumulative plan benefits paid shall be paid as an additional death benefit.

#### **Termination Benefit**

If a legislator ceases to be a member of the plan other than by death or disability prior to meeting the eligibility requirements for normal retirement, the amount of the member's accumulated contributions shall be returned to the member. If, thereafter, this individual again becomes a holder of an office qualifying for membership in this plan, this person shall not be entitled to credit for the prior period of service unless, at the time he again participates in the plan, the amount previously refunded is repaid, with interest.

#### **Cost-of-Living Adjustment**

Ad hoc cost-of-living adjustments (COLA's) have been granted as noted below:

Effective Date of Increase	Percentage Increase	Increase Applies To Benefits Based on Service Prior To
7/1/1990	5%	6/30/1990
7/1/1991	5%	6/30/1991
7/1/1992	1%	6/30/1992
7/1/1993	1%	6/30/1993
7/1/1994	5%	6/30/1994
7/1/1995	5%	6/30/1995
7/1/1996	None	N/A
7/1/1997	None	N/A
8/1/1998	2.3%	N/A
7/1/1999	1.6%	N/A
7/1/2000	2.2%	N/A
7/1/2001	3.4%	N/A
7/1/2002	2.85%	N/A
7/1/2003	1.6%	N/A
7/1/2004	2.3%	N/A
7/1/2005	2.7%	N/A
7/1/2006	3.4%	N/A
7/1/2007	3.2%	N/A
7/1/2008	2.8%	N/A
7/1/2009 and later*	1.5%	N/A

\*COLA's were suspended for fiscal years beginning in 2012 and 2013; COLA's after 7/1/2013 are not reflected in this valuation. No further COLA's will be granted until the plan is 100% funded, unless a one-time COLA is 100% prefunded.

In addition, a provision for an on-going cost-of-living adjustment is made by statute. Effective August 1, 1998 and each July 1 thereafter, a recipient of a monthly pension shall receive a cost-of-living adjustment keyed to the Consumer Price Index. This COLA is excluded from the inviolable contract and can be repealed by the General Assembly at any time. Beginning July 1, 2009, this cost-of-living adjustment will be 1.50% for all retirees who have been retired in excess of one year and prorated for those retired less than one year.

The prior language relating to COLA adjustments remains in the statute. Under that provision, as of each July 1, (beginning July 1, 1983) the pension of each beneficiary shall be redetermined as the greater of the present pension, or a pension recomputed at a 1.925% benefit rate and using the current 60 month average earnings of the office held by the retiree at the time of retirement (such computed pension subject to a maximum of 55% of that average earnings), subject to a 4.0% COLA annually.

Pursuant to statutory requirements, COLA increases are not reflected in plan liabilities until actually granted, except for any anticipated COLA adjustments under the provision as in effect prior to August 1, 1998.

#### **Prior Service Credit**

Credit in KERS or TRS, for legislative service prior to the creation of this plan on July 1, 1980, can be (and in many instances was) transferred to and become credit in this plan, upon transfer to this plan of the accumulated contributions plus interest (member's and state's) that were made to acquire the credit.

#### **Medical Insurance Premium Supplement**

Retired members, in addition to actual retirement benefits, will have a percentage of their (and their dependent's) medical insurance premium paid by the plan. The percentage will vary based on the numbers of years of service credit as follows:

Years of Service Credit at Retirement	Percentage of Medical Insurance Premium Paid by the Plan
20 or more	100%
19, but less than 20	95%
18, but less than 19	90%
17, but less than 18	85%
16, but less than 17	80%
15, but less than 16	75%
14, but less than 15	70%
13, but less than 14	65%
12, but less than 13	60%
11, but less than 12	55%
10, but less than 11	50%
4, but less than 10	25%
Less than 4	0%

The current premium rates in effect are:

	<b>Monthly Premium</b>
Under age 65	
Family coverage	\$1,701.04
Single coverage	699.28
Parent Plus coverage	995.34
Member and Spouse	1,528.34
Age 65 or older	
Medicare Advantage PPO	391.00

Premium rates are approved by the Board.

### **ACTUARIAL ASSUMPTIONS**

#### **Funding Method**

Accrued liability and normal cost calculated based on Entry Age Normal funding method. The required contribution is calculated based on KRS 21.525, which requires contributions of normal cost plus interest on the unfunded liability plus 1% of the unfunded liability.

#### **Interest**

7% per annum – this rate was selected by the Board of Trustees and BPS&M and the Fund Investment Manager believe this to be a reasonable long-term rate of return assumption.

The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at the current statutory contribution rates. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members through June 30, 2062. The long-term expected rate of return on pension plan investments was applied to periods of projected benefit payments through this date, and the municipal bond rate was used for the period thereafter to determine the total pension liability. The discount used to measure the total pension liability on the second bases was 7.00% for 47 years and 3.80% thereafter. This is equivalent to an average assumed rate of return of approximately 6.85%.

#### **Mortality**

Beginning July 1, 2015: RP-2000 Mortality Tables with white collar adjustment with Pre and Post Commencement Rates with projected mortality improvements after year 2000 under Projection Scale AA (male and female scales); i.e., full generational mortality.

Prior to July 1, 2015: IRS Mortality Tables without collar adjustment with Pre and Post Commencement Rates with projected mortality improvements after year 2000 under Projection Scale AA (male and female scales); i.e., full generational mortality.

#### **Terminations**

Table T-4 from the Actuary's Pension Handbook. Specimen rates are as follows:

Age	Rate of Termination
20	.054
25	.053
30	.051
35	.047
40	.042
45	.035
50	.025
55	.009
60	.001
65+	.000

### **ACTUARIAL ASSUMPTIONS**

#### **Salary Increases**

1% for the next five years and 3.5% thereafter;

Liabilities have been adjusted to reflect the potential impact of non-legislative salaries on future pension benefits. The liabilities for members (including terminated members) who could be impacted by non-legislative salaries have been increased by 40% to recognize the potential increase in plan liability.

#### **Disability**

None

#### **Retirement Age**

Retirements were assumed to occur as follow:

Retirement Age	Percentage of Active Members Retiring
NRA-5	16.67%
NRA-4	20.00%
NRA-3	25.00%
NRA-2	33.33%
NRA-1	50.00%
NRA	100.00%

NRA = Normal Retirement Age

In addition to these rates, an extra 20% rate is assumed at the age a member reaches 27 years of service credit.

#### **Post-Retirement Death Benefit**

Assumption is that 80% of the legislators would be married at retirement and the husband would be 3 years older than the wife on average.

#### **Pre-Retirement Death Benefit**

Assumption is that 80% of the legislators would be survived by a spouse upon death prior to retirement and that the husband would be 3 years older than the wife on average.

#### **Cost-of-Living Adjustment**

Pursuant to statutory requirements, COLA increases are not reflected in plan liabilities until actually granted, except for any anticipated COLA adjustments under the provision as in effect prior to August 1, 1998. For the purposes of the calculation of the Recommended Contribution, a full 1.5% annual COLA has been reflected.

### **ACTUARIAL ASSUMPTIONS**

#### **Medical Insurance Premium Supplement**

Medical premiums will increase for each year beyond the valuation date at the following rates:

Year 1	11%
Year 2	10%
Year 3	9%
Year 4	8%
Year 5	7%
Year 6	6%
Years 7+	5%

It was further assumed that coverage would be split among retirees as follows:

	% of Retirees	% With Spouse Coverage
Pre-Medicare Coverage		
Family	32%	N/A
Single	21%	N/A
Parent Plus	32%	N/A
Member and Spouse	16%	N/A
Medicare Coverage		
Medicare Advantage PPO	100%	75%

The assumed annual claims costs per subscriber as of July 1, 2015 are:

Pre-65 Cost	Post-65 Cost
\$ 17.101	\$ 8.211

Claims were adjusted downward 3% each year for aging for attained ages 55 to 65.

Retirees are assumed to contribute the difference between the premium rate and the portion of the premium paid by the Plan. Premium rates and Plan contributions are described in the Summary of Benefits.

#### **Non-members**

Legislators electing not to participate are assumed to continue as non-members in the future.

### **ACTUARIAL METHODS**

### **Asset Valuation Method**

The determination of the actuarial value of assets is as follows:

- 1. Investment gains/losses are determined for each year by comparing the expected value of assets based on the assumed interest assumption to actual market value. Expected value of assets in each year shall be determined by projecting the market value of assets from the prior year using the assumed interest rate, plus contributions less benefit payments and plan expenses (adjusted with interest at the assumed rate). If the expected value of plan assets is different than the actual market value of plan assets then the difference is treated as a gain or loss for that year.
- 2. The amount of any gain or loss as determined above shall be recognized evenly over the subsequent five
- 3. The actuarial value of assets on any valuation date shall be equal to the market value of assets on that date adjusted as follows:
  - Reduced by 80% of a gain or increased by 80% of a loss from the preceding year
  - Reduced by 60% of a gain or increased by 60% of a loss from the 2<sup>nd</sup> preceding year

  - Reduced by 40% of a gain or increased by 40% of a loss from the 3<sup>rd</sup> preceding year Reduced by 20% of a gain or increased by 20% of a loss from the 4<sup>th</sup> preceding year

This asset valuation method is used in both the determination of funding levels as well as for disclosure purposes under GASB Statement Nos. 43 and 45. The fair market value of assets is used for disclosure purposes under GASB Statement Nos. 67 and 68.

For purposes of GASB Statement Nos. 43, 45, 67, and 68, the market value of assets has been allocated between retirement related and medical premium supplement liabilities. This market value allocation is carried forward each year based on the following:

- 1. State and member contributions, as well as transfers for purchase of additional service, are allocated prorata reflecting the Annual Required Contribution for that year.
- 2. Benefits paid reflect actual benefits paid relative to retirement related benefits separately from medical premium supplements.
- 3. Preliminary assets are determined by adjusting beginning value for allocated State and member contributions and actual benefits paid.
- 4. Net investment return is allocated pro-rata based on the preliminary assets developed in the previous step.
- Allocated assets as of the valuation date equal the preliminary balance plus the allocated share of investment income.

Actuarial value of assets is developed initially in total and then allocated between retirement related benefits and medical premium supplement benefits on a pro-rata basis reflecting allocated share of market value as of the valuation date.

# Statement of Changes in Fiduciary Net Position Under GASB Statement No. 67

	June 30, 2015
Additions	
Contributions:	
Employer	\$3,366,500
Employee	216,777
Total Contributions	3,583,277
Investment Income	5,550,371
Other	0
Total Additions	9,133,648
Deductions	
Benefit Payments / Refunds	3,690,251
Administrative Expenses	0
Other	0
Total Deductions	3,690,251
Net Increase in Net Position	5,443,397
Net Position Restricted for Pensions	
Beginning of Year	54,644,796
End of Year	\$60,088,193

### Net Pension Liability Under GASB Statement No. 67

### **Determination of Net Pension Liability**

	June 30, 2015
Total Pension Liability (6.85%)	76,211,711
Plan Fiduciary Net Position	(60,088,193)
Net Pension Liability	\$16,123,518

Plan Fiduciary Net Position as a Percentage of Total Pension Liability

78.84%

### Sensitivity of Net Pension Liability to Changes in the Discount Rate

	1% Decrease	Current Rate	1% Increase
	(5.85%)	(6.85%)	(7.85%)
Net Pension Liability	\$24,401,512	\$16,123,518	\$9,198,442

#### Schedule of Changes in the Net Pension Liability and Related Ratios (Dollar amounts in millions)

				fis	cal year en	ding June	30			
	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Total Pension Liability										
Service cost	\$1.0	\$1.0								
Interest	4.9	5.1								
Changes of benefit terms	0.0	0.0								
Differences between expected and actual experience	0.0	(3.4)								
Changes of assumptions	3.7	(1.5)								
Benefit Payments / Refunds	(3.5)	(3.7)								
Net Change in Total Pension Liability	\$6.1	(\$2.5)								
Total Pension Liability - beginning	72.6	78.7								
Total Pension Liability - ending (a)	\$78.7	\$76.2								_
Plan Fiduciary Net Position										
Contributions - employer	\$1.8	\$3.4								
Contributions - employee	0.2	0.2								
Net investment income	7.9	5.6								
Benefit Payments / Refunds	(3.5)	(3.7)								
Administrative expenses	0.0	0.0								
Other	0.0	0.0								
Net Change in Plan Fiduciary Net Position	\$6.4	\$5.5								
Plan Fiduciary Net Position - beginning	48.2	54.6								
Plan Fiduciary Net Position - ending (b)	\$54.6	\$60.1								
Net Pension Liability - ending (a) - (b)	\$24.1	\$16.1								
Plan Fiduciary Net Position as a % of the Total	50.404	<b>=</b> 0.00/								
Pension Liability	69.4%	78.9%								
Covered-employee payroll	\$5.0	\$4.5								
Net Pension Liability as a % of covered-employee	102 20/	257 90/								
payroll	483.2%	357.8%								
Discount Rate	6.50%	6.85%								

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### Schedule of Contributions Under GASB Statement No. 67

				fisc	al year en	ding June	30			
	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Actuarially determined contribution  Contributions in relation to the actuarially	\$3.2	\$3.4								
determined contribution	1.8	3.4								
Contribution deficiency (excess)	\$1.4	\$0.0								
Covered-employee payroll Contributions as a percentage of covered-	\$5.0	\$4.5								
employee payroll	36.1%	75.6%								

### Additional Requirements Under GASB Statement No. 67

GASB Statement No. 67 also requires a Statement of Fiduciary Net Position (which includes a breakdown of current assets by type) and additional investment information, including the annual money-weighted rate of return. In order to satisfy GASB Statement No. 67, these required pieces will need to be provided by The Kentucky Judicial Form Retirement System. BPS&M is prepared to assist the system as needed.

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# Schedule of Changes in NPL, Deferrals, & Pension Expense

	Increase	(Decrease)				
	Total Pension Liability (a)	Plan Net Position (b)	Net Pension Liability (a) - (b)	Deferred Pension Outflows of Resources	Deferred Pension Inflows of Resources	Pension Expense
Balancesat 06/30/14	\$ 78,747,992	\$ 54,644,796	\$ 24,103,196	\$ 5,842,397	\$ 3,773,444	
Changes for the Year:						
Service cost	1,045,808		1,045,808			1,045,808
Interest expense	5,076,658		5,076,658			5,076,658
Benefit changes						
Experience losses (gains)	(3,421,805)		(3,421,805)	-	1,624,639	(1,797,167)
Changes of assumptions	(1,546,691)		(1,546,691)	-	734,353	433,699
ContributionsState		3,366,500	(3,366,500)			
ContributionsMembers		216,777	(216,777)			(216,777)
Net investment income		5,550,371	(5,550,371)			
Expected return on plan investments						(3,826,988)
Current expense of asset gain/loss						(1,288,038)
Non expensed asset gain/loss				-	1,378,706	
Refunds of contributions	-	-	-			
Benefits paid	(3,690,251)	(3,690,251)	-			
Plan administrative expenses						
Recognition of Prior Post-measurement Contribu	ıtion			(3,366,508)		
Post-measurement Contribution				3,366,508		
Other changes						
Amortization of or change in beginning balances				(1,246,037)	(943,361)	
Net Changes	(2,536,281)	5,443,397	(7,979,678)	(1,246,037)	2,794,337	(572,804)
Balancesat 06/30/15	\$ 76,211,711	\$ 60,088,193	\$ 16,123,518	\$ 4,596,361	\$ 6,567,781	\$ (572,804)

### Pension Expense & Deferred Outflows/Inflows of Resources

For the year ended June 30, 2016, the recognized pension expense/(income) will be (\$572,804). At June 30, 2016, The Kentucky Judicial Form Retirement System reported deferred outflows of resources and deferred inflows of resources in relation to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources	Remaining Amort. Period
Experience losses (gains)			
- 6/30/2015		1,624,639	0.904 years
subtotal	-	1,624,639	
Change of assumptions			
- 6/30/2014	1,229,853	-	0.987 years
- 6/30/2015	-	734,353	0.904 years
subtotal	1,229,853	734,353	
Net difference between projected and actual earnings on investments			
- 6/30/2014	-	2,830,083	3.000 years
- 6/30/2015	-	1,378,706	4.000 years
subtotal	-	4,208,789	•
Total	\$ 1,229,853	\$ 6,567,781	

Actual investment earnings above (or below) projected earnings are amortized over 5 years. Changes of assumptions are amortized over the average remaining service period of actives and inactives (0 years of future service is assumed for inactives for this calculation).

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Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year ended June 30:	
2017	(2,417,177)
2018	(1,288,038)
2019	(1,288,038)
2020	(344,677)
2021	-
Thereafter	-

In addition, Governmental Accounting Standards Board Statement 71 ("GASB 71") requires contributions between the measurement date (July 1, 2015) and the disclosure date (June 30, 2016) for GASB 68 be reported as a deferred outflow of resources.

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# Schedule of Funding Progress Under GASB Statement No. 43

Actuarial	Actuarial Value	Actuarial Accrued	Unfunded AAL	Funded	Covered	UAAL as a % of
Valuation	of Assets	Liability (AAL)	(UAAL)	Ratio	Payroll	Covered Payroll
Date	(a)	(b)	(b - a)	(a / b)	(c)	((b - a) / c)
7/1/2007	\$ 24,289,368	\$ 22,489,737	\$ (1,799,631)	108.0%	\$ 4,763,785	-37.8%
7/1/2008	\$ 25,117,103	\$ 23,668,943	\$ (1,448,160)	106.1%	\$ 4,755,214	-30.5%
7/1/2009	\$ 24,413,467	\$ 18,481,365	\$ (5,932,102)	132.1%	\$ 4,916,770	-120.7%
7/1/2010	\$ 23,908,481	\$ 19,434,535	\$ (4,473,946)	123.0%	\$ 4,916,770	-91.0%
7/1/2011	\$ 23,337,392	\$ 20,533,088	\$ (2,804,304)	113.7%	\$ 5,192,619	-54.0%
7/1/2012	\$ 24,238,386	\$ 21,582,890	\$ (2,655,496)	112.3%	\$ 5,192,619	-51.1%
7/1/2013	\$ 25,907,629	\$ 23,363,734	\$ (2,543,895)	110.9%	\$ 4,987,823	-51.0%
7/1/2014	\$ 29,405,073	\$ 24,525,907	\$ (4,879,166)	119.9%	\$ 4,987,823	-97.8%
7/1/2015	\$ 33,194,900	\$ 26,955,434	\$ (6,239,466)	123.1%	\$ 4,467,419	-139.7%

### Schedule of Employer Contributions Under GASB Statement No. 45

Year	Annual		OPEB
Ended	Pension	Percentage	Benefit
June 30	Cost	Contributed	Obligation
2009	\$ 59,759	100%	\$ (3)
2010	\$ 59,759	100%	\$ (6)
2011	\$ -	100%	\$ (6)
2012	\$ -	100%	\$ (6)
2013	\$ -	100%	\$ (6)
2014	\$ -	100%	\$ (6)
2015	\$ -	100%	\$ (6)

### **Determination of Annual OPEB Cost Under GASB Statement No. 45**

	Applicable													OPEB
Fiscal Yr	Valuation		I	nterest on	ARC		Amort.	OPEB			C	hange in OPEB	O	bligation
Ending	Report Used	ARC	OPE	B Obligation	Adjustme	ent	Factor	Cost	C	ontribution		Obligation	I	Balance
6/30/2008	7/1/2005	\$ 285,476	\$	=	\$ -		12.594409	\$ 285,476	\$	285,476	\$	-	\$	=
6/30/2009	7/1/2007	\$ 59,759	\$	=	\$ -		12.594409	\$ 59,759	\$	59,762	\$	(3)	\$	(3)
6/30/2010	7/1/2007	\$ 59,759	\$	=	\$ -		12.409041	\$ 59,759	\$	59,762	\$	(3)	\$	(6)
6/30/2011	7/1/2009	\$ -	\$	-	\$ -		12.409041	\$ -	\$	-	\$	-	\$	(6)
6/30/2012	7/1/2009	\$ -	\$	-	\$ -		12.409041	\$ -	\$	-	\$	-	\$	(6)
6/30/2013	7/1/2011	\$ -	\$	-	\$ -		12.409041	\$ -	\$	-	\$	-	\$	(6)
6/30/2014	7/1/2011	\$ -	\$	=	\$ -		12.409041	\$ -	\$	=	\$	-	\$	(6)
6/30/2015	7/1/2013	\$ -	\$	=	\$ -		12.409041	\$ -	\$	=	\$	-	\$	(6)

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### **GASB NOTES**

### Notes to GASB 43, 45, 67 and 68 Disclosures

- 1. The tables in this report account for liabilities and assets only for the traditional defined benefit/OPEB tier under the plan; liabilities and assets pertaining to the hybrid cash balance/OPEB tier are presented in a separate report.
- 2. Actuarial accrued liability is based on the projected unit credit funding method for actuarial valuations prior to July 1, 2013 and the entry age normal funding method thereafter.
- 3. Effective July 1, 2007, OPEB liabilities and allocated assets have been excluded from GASB 67 and 68 disclosures and established in GASB 43 and 45 disclosures.
- 4. Market value of assets as of July 1, 2007 was allocated between pension and OPEB obligations based on proportionate share of accrued liability on that date. Allocations in subsequent years are based on prior year allocated value adjusted for contributions and benefits paid during the year, with investment return (net of expenses) allocated proportionately between retirement and OPEB obligations. Actuarial value of assets is then allocated based on the market value of retirement and OPEB assets.
- 5. Actuarial value of assets is equal to cost value prior to 1990, 1990 through 2002 utilize market related value based on the average of the ratio of market to cost value over the prior five years applied to current cost value. 2003 and later use a 5-year asset smoothing method that is phased in from July 1, 2003 market value.
- 6. Information used in preparing these exhibits has been extracted from past valuation reports.
- 7. Covered payroll reflects payroll for all current plan members.
- 8. Fiscal years beginning prior to December 15, 1986 have not been included pursuant to paragraph 32 of GASB Statement No. 27.
- 9. Interest on OPEB Obligation is based on assumed valuation interest assumption for the prior year. The interest rates for prior years are as follows: 7% through 1999 valuation; 8% for 2001 and 2003 valuations; 7.5% beginning with 2005 valuation; 7% beginning with 2009 valuation.
- 10. GASB 67 replaces GASB 25 effective for the fiscal year ending June 30, 2014. The valuation date, disclosure date, and measurement date all fall on the same date for purposes of GASB 67.
- 11. GASB 68 replaces GASB 27 effective for the fiscal year ending June 30, 2015. It is assumed the measurement date for GASB 68 will be 12 months before the disclosure date. For the year ending June 30, 2016, the measurement date is July 1, 2015 (the valuation date).

Note: Above statements are partially based on information furnished by the prior actuary.

# SUMMARY OF PARTICIPANT DATA

# Distribution of Active Participants with Average Compensation

					Ye	ears of Credited	d Service				
Attained Age	Under 1	1 – 4	5 – 9	10 - 14	15 – 19	20 - 24	25 – 29	30 - 34	35 – 39	Over 39	Total
Under 25											<del></del> -
Chack 25											
25 – 29											
30 – 34		4									4
		\$43,161									\$43,161
35 - 39		4	1	1							6
		\$39,090	\$38,008	\$41,620							\$39,331
40 - 44		1			1						2
		\$39,377			\$40,670						\$40,024
45 – 49		5	3	8							16
		\$40,718	\$42,980	\$43,004							\$42,285
50 - 54		2	5	3	1	1	1				13
		\$43,890	\$39,373	\$40,923	\$40,732	\$39,529	\$62,605				\$42,329
55 - 59		3	2	3	3	2	2				15
		\$38,276	\$43,276	\$45,869	\$42,138	\$42,155	\$50,390				\$43,366
60 - 64		3	5	4	7	2		1			22
		\$40,842	\$44,146	\$42,949	\$44,683	\$52,247		\$50,365			\$44,668
65 – 69		3	2	3		5	1		1		15
		\$41,620	\$41,451	\$44,380		\$44,256	\$40,162		\$48,594		\$43,396
Over 69			1	5	3	1		1			11
			\$37,058	\$40,890	\$41,624	\$42,482		\$58,922			\$42,526
Total		25	19	27	15	11	4	2	1		104
		\$40,879	\$41,634	\$42,793	\$43,031	\$44,736	\$50,887	\$54,643	\$48,594		\$42,956

# SUMMARY OF PARTICIPANT DATA

# Distribution of Inactive Participants with Average Annual Benefit

Attained	Retired and	Terminated	Total
Age	Beneficiaries		
Under 50	1	4	5
	\$22,459	\$12,130	\$14,195
50 - 54	3	8	11
	\$32,222	\$8,051	\$14,643
55 - 59	6	10	16
	\$20,238	\$18,556	\$19,187
60 - 64	12	15	27
	\$35,728	\$17,883	\$25,814
65 - 69	43	5	48
	\$15,999	\$23,324	\$16,762
70 - 74	40	1	41
	\$17,281	\$25,329	\$17,477
75 - 79	44	1	45
	\$20,650	\$60,849	\$21,543
80 - 84	29	1	30
	\$18,072	\$49,178	\$19,109
85 - 89	12		12
	\$19,153		\$19,153
90 - 94	3		3
	\$31,143		\$31,143
Over 94	1		1
	\$7,113		\$7,113
Total	194	45	239
	\$19,647	\$18,194	\$19,373
	427,517	Ψ10,171	4,010